

### **Remarks**

The final Office Action mailed May 16, 2007 rejected claims 28-29, 31, 33-34, 36-38 and 40-51, and objected to claims 30, 32, 35 and 39. A post-final amendment has been presented to claim 30 above to change the dependency of this claim from “30” to “28” and a post-final amendment has been presented to claim 35 above to change the dependency of this claim from “35” to “34.” Support includes the antecedent basis for the phrase “suction pressure” introduced by claim 34. The Applicant apologizes for the inconvenience caused by this inadvertent error. This amendment is proper and does not introduce new matter.

### **Allowable Subject Matter**

The Applicant gratefully acknowledges the indication of allowability of dependent claims 30, 32, 35 and 39. All claims are believed allowable, however, for the reasons set forth below.

### **Rejection of Claims Under 35 U.S.C. §103(a)**

Claims 28-29, 31, 33-34, 36-38 and 40-51 stand finally rejected as being obvious over U.S. Patent No. 6,728,062 to Ou-Yang et al. (“Ou-Yang ‘062”) in view of U.S. Patent No. 5,818,658 to Balster et al. (“Balster ‘658”). This rejection is respectfully traversed.

#### **1. Independent Claim 28**

Independent claim 28 features “a *blower assembly which provides blowing pressure to the downstream trailing edge*” of the recited “*cantilevered assembly*.” In support of the rejection, the Examiner found Balster ‘658 to teach the recited “*blower assembly*.” Final Office Action, page 3, line 1. This is respectfully traversed.

Balster '658 teaches a vacuum pump 26 which applies vacuum to the HGA 12. Balster '658, col. 2, lines 56-67; col. 3, lines 2-4; FIG. 2. The skilled artisan would immediately understand that a vacuum pump that supplies vacuum is not the same thing as, and indeed is the opposite of, the “*blower assembly which provides blowing pressure*” recited by claim 28.

In construing a claim term, the Examiner is obliged to give the “*broadest reasonable interpretation consistent with the specification.*” *Phillips v. AWH Corp.*, 75 USPQ2d 1321 (Fed. Cir. 2005)(en banc); MPEP 2111. An interpretation that is opposite that set forth by the specification is not “*consistent with the specification,*” and is therefore not “*reasonable.*” *In re Buszard*, 06-1489 (Fed. Cir. September 27, 2007); *In re Morris*, 44 USPQ2d 1023 (Fed. Cir. 1997).

The specification of the present application clearly distinguishes between a blower assembly and a vacuum source, with the former blowing air (or other medium) to the cantilevered member while the latter provides suction from the cantilevered member. See specification, page 4, lines 7-13 (“*the blower assembly 126 includes a nozzle 130 directed to provide pressure (e.g. air, gas or other medium) from a pressure source or blower 132 proximate to the downstream region 122 of the cantilevered head assembly.*”); page 4, line 29 to page 5, line 10 (“*Vacuum assembly 154 provides suction proximate to the upstream region 120 of the cantilevered head assembly to control windage or flow disturbances*”); FIGS. 2, 3A, 4.

Asserting that the recited “blower assembly” in claim 28 could be construed to cover the vacuum source taught by Balster '658, as the Examiner has done here, is directly inconsistent with the specification of the present application, as well as directly inconsistent

with the understanding of the skilled artisan in view thereof. The rejection is therefore improper.

All of the words appearing in a claim are material and must be properly accounted for when judging the patentability of the claim over the teachings and suggestions of the prior art. *In re Wilson*, 165 USPQ 494, 496 (CCPA 1970); MPEP 2143. The Examiner has failed to show a teaching or suggestion for the recited “*blower assembly*,” and has accordingly failed to establish a *prima facie* case of obviousness. *In re Royka*, 180 USPQ 580 (CCPA 1974); MPEP 2143.03.

Reconsideration and withdrawal of the rejection of claim 28, and for the claims depending therefrom, are respectfully requested on this basis.

## 2. Independent Claim 38

Independent claim 38 features “*a vacuum assembly which provides suction pressure solely to a region proximate the upstream leading edge.*” The Examiner found this to be satisfied by the vacuum pump taught by Balster ‘658. This is respectfully traversed.

As previously pointed out to the Examiner, Balster ‘658 fails to teach or suggest the recited “*vacuum assembly*” of claim 38. Rather, the vacuum pump taught by Balster ‘658 necessarily provides suction pressure to both the upstream leading edge and the downstream trailing edge of the HGA 12. Balster ‘658, col. 2, lines 59-63; see also FIG. 2.

Since neither of the cited references teaches or suggests “*suction pressure solely to a region proximate the upstream leading edge,*” no *prima facie* case of obviousness has been established. *Royka, Supra*; MPEP 2143.03.

Moreover, an obviousness rejection is evaluated by the Office in view of *Graham v.*

*John Deere Co.*, 383 US 1 (1966). Such analysis requires: (A) the claimed invention must be considered as a whole; (B) the references must be considered as a whole and must suggest the desirability and thus the obviousness of making the combination; (C) the references must be viewed without the benefit of impermissible hindsight vision afforded by the claimed invention; and (D) reasonable expectation of success is the standard with which obviousness is determined. See MPEP 2141.

In the present case, there is nothing that would suggest the desirability and thus the obviousness of arriving at the claimed combination from Balster '658 and Ou-Yang '062. When considered as a whole (per *Graham*), Balster '658 generates a lower pressure area adjacent the HGA 12 in order to increase the fly height of the slider 14 with respect to medium 22. More specifically, the lower pressure area pulls the HGA 12 downwardly away from the medium 22 and into contact with the nozzle 24. Col. 2, lines 62-63; FIG. 2.

The skilled artisan would therefore not find it desirable to apply the suction pressure "solely to a region proximate the upstream leading edge" as claimed, as this would not result in the desired controlled movement of the slider 14 intended by the system of Balster '658. Rather, the skilled artisan would understand that if the claimed operation could be induced at all by modification of the system of Balster '658, the result would be either no adjustment in fly height at all, or an undesired torsion of the HGA 12.

The Examiner is respectfully reminded that mere conclusory statements by the Examiner with regard to the obviousness of the combination are insufficient to establish a *prima facie* case of obviousness; rather, there must be "*some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.*" *In re Kahn*, 441 F.3d 997, 988 (Fed. Cir. 2006); *KSR v. Teleflex*, 127 S.Ct. 1727 (2007). No such

“*articulated reasoning with some rational underpinning*” has been provided by the Examiner.

With regard to the rejection of claim 38 the Examiner merely stated, “[a]s to Claim 38, 40-43 have limitations similar to those treated in the rejection of claims 28, 31, 34, 36, and are met by the references as discussed above.” Final Office Action, page 4, lines 9-10. The Applicant notes that none of the claims 28, 31, 34 or 36 recite the suction pressure is provided “solely to a region proximate the upstream leading edge,” as explicitly set forth by claim 38. No rationale for the rejection of claim 38 with regard to the “*solely to*” language has therefore been supplied at all, much less one with “*articulated reasoning with some rational underpinning*,” as required.

The rejection of claim 38 thus constitutes an improper hindsight reconstruction of the claim in which the Examiner selected various aspects of the respective references without regard to the actual teachings and suggestions thereof to (unsuccessfully) arrive at the claimed combination. *Graham, Supra*. Reconsideration and withdrawal of the rejection of claim 38, and for the claims depending therefrom, are further respectfully requested on this basis.

### 3. Independent Claim 48

Independent method claim 48 generally features a step of “supplying suction pressure proximate to the upstream leading edge without providing said suction pressure proximate to the downstream trailing edge.” This has also not been shown as being taught or suggested by the cited references.

As noted above, Balster ‘658 teaches even application of the suction pressure to

both upstream and downstream edges of the HGA 12 to draw the slider 14 to a greater fly height adjacent medium 22. There is nothing that teaches or suggests “*supplying suction pressure proximate to the upstream leading edge without providing said suction pressure proximate to the downstream trailing edge*” as claimed, nor would the skilled artisan, considering the references as a whole (per Graham), find such to be desirable.

As with the rejection of claim 38, the Examiner merely stated that claim 48 “*has limitations similar to those treated in the rejections of claims 28 and 34 and are met by the references as discussed above.*” Final Office Action, page 4, lines 20-21. This fails to provide the requisite “*articulated reasoning with some rational underpinning*” necessary to establish a *prima facie* case of obviousness. *Kahn, Supra*. Reconsideration and withdrawal of the rejection of claim 48, and for the claims depending therefrom, are accordingly solicited.

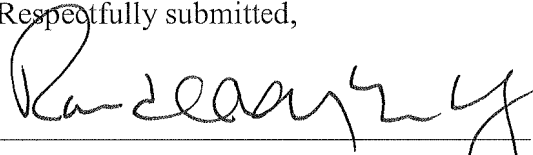
### **Conclusion**

The Applicant respectfully requests reconsideration and allowance of all of the claims pending in the application. This Response is intended to be a complete response to the final Office Action mailed May 16, 2007.

Should any questions arise concerning this response, the Examiner is invited to contact the below signed Attorney.

Respectfully submitted,

By: \_\_\_\_\_

A handwritten signature in black ink, appearing to read "Randall K. McCarthy", written over a horizontal line.

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